7. **REGULATIONS AND ADVISORIES**

Because of their potential to cause adverse health effects in exposed people, a number of regulations and guidelines have been established for bromoform and chlorodibromomethane by various international, national and state agencies. These values are summarized in Table 7-l.

7. REGULATIONS AND ADVISORIES

TABLE 7-1. Regulations and Guidelines Applicable to Chlorodibromomethane and Bromoform[a]

Agency	Description	Value[b]	Reference
	National		
Regulations:			
a. Air:			
OSHA	PEL TWA (TBM)	0.5 ppm ($5\ mg/m^3$)	OSHA 1989 29 CFR 1910.1000 Table Z-1-A
b. Water:			
EPA ODW	MCL (Total trihalomethanes)	0.10 mg/L	40 CFR 141.12
	Monitoring for unregulated contaminants	NA	EPA 1987a (40 CFR 141.35, 141.40)
EPA OWRS	General permits under NPDES	NA	40 CFR 122 (Appendix D Table II)
	Criteria and Standards for NPDES	NA	40 CFR 125
	General pretreatment regulations for existing and new sources of pollution	NA	40 CFR 403
c. Nonspecific media:			
EPA OERR	Reportable quantity	100 lb	EPA 1985 (40 CFR 302.4)
EPA OSW	Hazardous waste constituent (Appendix VIII)	NA	EPA 1980a (40 CFR 261)
	Groundwater monitoring list (Appendix IX)	NA	EPA 1987b (40 CFR 264)
	Land disposal restrictions	NA	EPA 1987c, 1988c (40 CFR 268.32)
EPA OTS	Health and safety data reporting rule	NA	EPA 1988a (40 CFR 716)
	Toxic chemical release reporting (TBM)	NA	EPA 1988b (40 CFR 372)
FDA	Bottled water (Total trihalomethanes)	0.10 mg/L	21 CFR 103.35
Guidelines:			
a. Air:			
ACGIH	TLV TWA (TBM)	0.5 ppm ($5\ mg/m^3$)	ACGIH 1986
b. Water:			
EPA ODW	RfD (oral)	$2x10^{-2}$ mg/kg/day	IRIS 1988
EPA OWRS	Ambient water quality criteria[c] (Halomethanes)		EPA 1980b
	Ingesting water and organisms		
	10^{-5}	$1.9x10^{-3}$ mg/L	
	10^{-6}	$1.9x10^{-4}$ mg/L	
	10^{-7}	$1.9x10^{-5}$ mg/L	

7. REGULATIONS AND ADVISORIES

TABLE 7-1 (Continued)

Agency	Description	Value	Reference
	Ingesting organisms only		
	10^{-5}	$1.57x10^{-1}$ mg/L	
	10^{-6}	$1.57x10^{-2}$ mg/L	
	10^{-7}	$1.57x10^{-3}$ mg/L	
NAS	SNARL (CDBM)		
	1 day	18 mg/L	NAS 1980
	State		
Regulations:			
a. Air:	Acceptable ambient air concentration (TBM)		NATICH 1988
Connecticut		100 $\mu g/m^3$ (8 hr)	
Nevada		0.1190 mg/m^3 (8 hr)	
Virginia		80 $\mu g/m^3$ (24 hr)	
North Dakota		0.05 mg/m^3 (8 hr)	
b. Water:	Drinking water		FSTRAC 1988
Maryland (TBM)			1 $\mu g/L$
Illinois (CDBM)		1 $\mu g/L$	

[a] All regulations listed apply to both chlorodibromomethane (CDBM) and bromoform (TBM), unless otherwise noted.
[b] Numerical values are provided in this column, when available. However, many regulations list chemicals and/or involve requirements too complex for inclusion here. In these cases, NA (Not Applicable is inserted in this column. The cited references provide details of the regulations.
[c] Because of the structural similarity of CDBM, TBM, and other trihalomethanes to chloroform, the criteria for this class of compounds was set equal to the criteria for chloroform. Because of its carcinogenic potential, the EPA-recommended concentration for chloroform in ambient water is zero. However, because attainment of this level may not be possible, levels which correspond to upper bound incremental lifetime cancer risks of 10^{-5}, 10^{-6}, and 10^{-7} were estimated.

OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit; TWA = Time-Weighted Average; TBM = bromoform; ppm = parts per million; mg = milligram; m^3= cubic meters; EPA = Environmental Protection Agency; ODW = Office of Drinking Water; MCL = Maximum Contaminant Level; L = liter; NA = Not Applicable; OWRS = Office of Water Regulations and Standards; NPDES = National Pollutant Discharge Elimination System; OERR = Office of Emergency and Remedial Response; lb = pound; OSW = Office of Solid Wastes; OTS = Office of Toxic Substances; FDA = Food and Drug Administration; ACGIH = American Conference of Governmental Industrial Hygienists; TLV = Threshold Limit Value; RfD = Reference dose; NAS = National of Sciences; SNARL = Suggested-no-adverse-response-level; CDBM = chlorodibromomethane; μg = microgram; hr = hour.